

Application No. 10/646,411
Amendment under 37 C.F.R. §1.312 dated September 1, 2005
Reply to Notice of Allowance of August 2, 2005

Docket No. 1232-5121

Amendments to the Claims:

Claims 1-17 are pending in this application. Claims 1, 8 and 15-17 are independent.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (CURRENTLY AMENDED): A printing apparatus which performs printing using a printhead having plural printing elements, comprising:

print data addition device configured to add print data corresponding to a defective printing element among said plural printing elements to print data corresponding to at least one adjacent normal printing element adjacent to the defective printing element;

mask device configured to mask the print data corresponding to said defective printing element; and

printing device configured to perform printing based on the print data as a result of addition by said print data addition device and the print data masked by said mask device.

2 (ORIGINAL): The printing apparatus according to claim 1, wherein said printing device prints an image by 1-path printing.

3 (ORIGINAL): The printing apparatus according to claim 1, wherein said print data addition device adds the print data corresponding to said defective printing element to print data corresponding to one adjacent normal printing element.

4 (ORIGINAL): The printing apparatus according to claim 1, wherein said mask device masks the print data corresponding to said defective printing element with 0 as null data.

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5 (ORIGINAL): The printing apparatus according to claim 1, wherein said print data addition device sequentially distributes the print data corresponding to said defective printing element between print data corresponding to two adjacent normal printing elements.

6 (ORIGINAL): The printing apparatus according to claim 1, wherein said print data addition device detects on/off states of print data corresponding to two adjacent normal printing elements and distributes the print data corresponding to said defective printing element based on the result of detection.

7 (ORIGINAL): The printing apparatus according to claim 6, wherein detection of on/off states of the print data is made as a case where one of the data corresponding to the two adjacent normal printing elements is on or off, and wherein if one of the data corresponding to the two adjacent normal printing elements is on, said print data addition device adds the data corresponding to said defective printing element to off data of the data corresponding to the two adjacent normal printing elements, while if one of the data corresponding to the two adjacent normal printing elements is off, said print data addition device sequentially distributes the data corresponding to said defective printing element between the data corresponding to the two adjacent normal printing elements.

8 (CURRENTLY AMENDED): A printing apparatus control method for controlling a printing apparatus which performs printing using a printhead having plural printing elements, comprising:

a print data addition step of adding print data corresponding to a defective printing element among said plural printing elements to print data corresponding to at least one

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adjacent normal printing element adjacent to the defective printing element;
a mask step of masking the print data corresponding to said defective printing
element; and

a printing step of performing printing based on the print data as a result of
addition at said print data addition step and the data masked at said mask step.

9 (ORIGINAL): The printing apparatus control method according to claim 8, wherein at
said printing step, an image is printed by 1-path printing.

10 (ORIGINAL): The printing apparatus control method according to claim 8, wherein at
said print data addition step, the print data corresponding to said defective printing element is
added to print data corresponding to one adjacent normal printing element.

11 (ORIGINAL): The printing apparatus control method according to claim 8, wherein at
said mask step, the print data corresponding to said defective printing element is masked with 0
as null data.

12 (ORIGINAL): The printing apparatus control method according to claim 8, wherein said
print data addition step, the print data corresponding to said defective printing element is
sequentially distributed between print data corresponding to two adjacent normal printing
elements.

13 (ORIGINAL): The printing apparatus control method according to claim 8, wherein at
said print data addition step, on/off states of print data corresponding to two adjacent normal
printing elements are detected and the print data corresponding to said defective printing element

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is distributed based on the result of detection.

14 (ORIGINAL): The printing apparatus control method according to claim 13, where in detection of on/off states of the print data is made as a case where one of the data corresponding to the two adjacent normal printing elements is on or off, and wherein if one of the data corresponding to the two adjacent normal printing elements is on, the data corresponding to said defective printing element is added to off data of the data corresponding to the two adjacent normal printing elements at said print data addition step, while if one of the data corresponding to the two adjacent normal printing elements is off, the data corresponding to said defective printing element is sequentially distributed between the data corresponding to the two adjacent normal printing elements at said print data addition step.

15 (CURRENTLY AMENDED): A control program for a printing apparatus which performs printing using a printhead having plural printing elements, for realizing functions of performing:

a print data addition step of adding print data corresponding to a defective printing element among said plural printing elements to print data corresponding to at least one adjacent normal printing element adjacent to the defective printing element;

a mask step of masking the print data corresponding to said defective printing element; and

a printing step of performing printing based on the print data as a result of addition at said print data addition step and the data masked at said mask step.

16 (CURRENTLY AMENDED): A computer-readable storage medium holding a control program for a printing apparatus which performs printing using a printhead having plural

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printing elements, or realizing functions of performing:

a print data addition step of adding print data corresponding to a defective printing element among said plural printing elements to print data corresponding to at least one adjacent normal printing element adjacent to the defective printing element;

a mask step of masking the print data corresponding to said defective printing element; and

a printing step of performing printing based on the print data as a result of addition at said print data addition step and the data masked at said mask step.

17 (CURRENTLY AMENDED): A printing apparatus which performs printing using a printhead having plural printing elements, comprising:

print data addition means for adding print data corresponding to a defective printing element among said plural printing elements to print data corresponding to at least one adjacent normal printing element adjacent to the defective printing element;

mask means for masking the print data corresponding to said defective printing element; and

printing means for performing printing based on the print data as a result of addition by said print data addition device and the print data masked by said mask device.